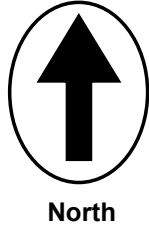
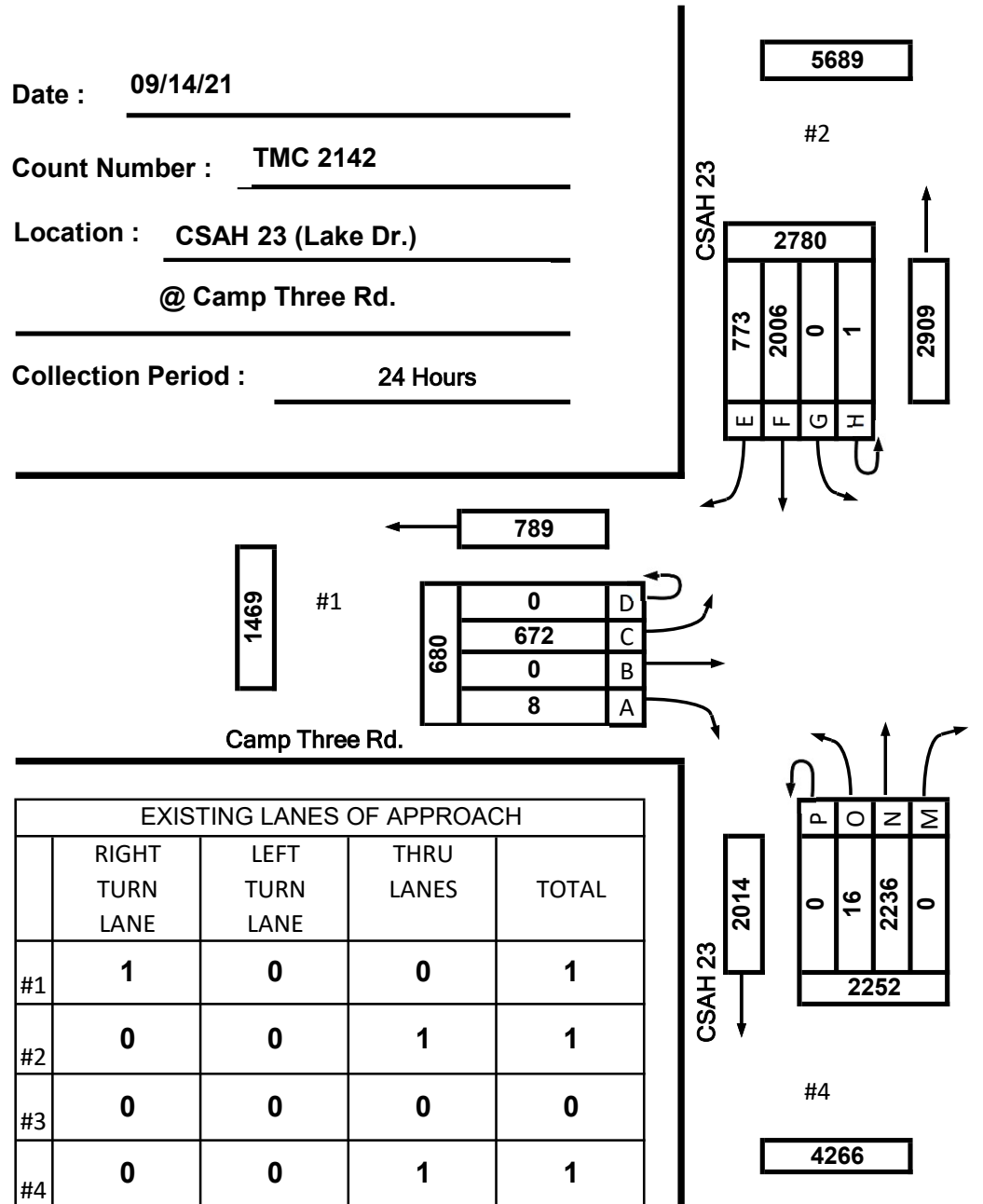


Date : 09/14/21

Count Number : TMC 2142

Location : CSAH 23 (Lake Dr.)
@ Camp Three Rd.

Collection Period : 24 Hours



North

EXISTING LANES OF APPROACH				
	RIGHT TURN LANE	LEFT TURN LANE	THRU LANES	TOTAL
#1	1	0	0	1
#2	0	0	1	1
#3	0	0	0	0
#4	0	0	1	1

Anoka County Highway Department

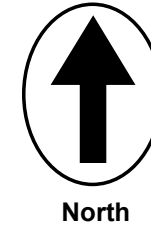
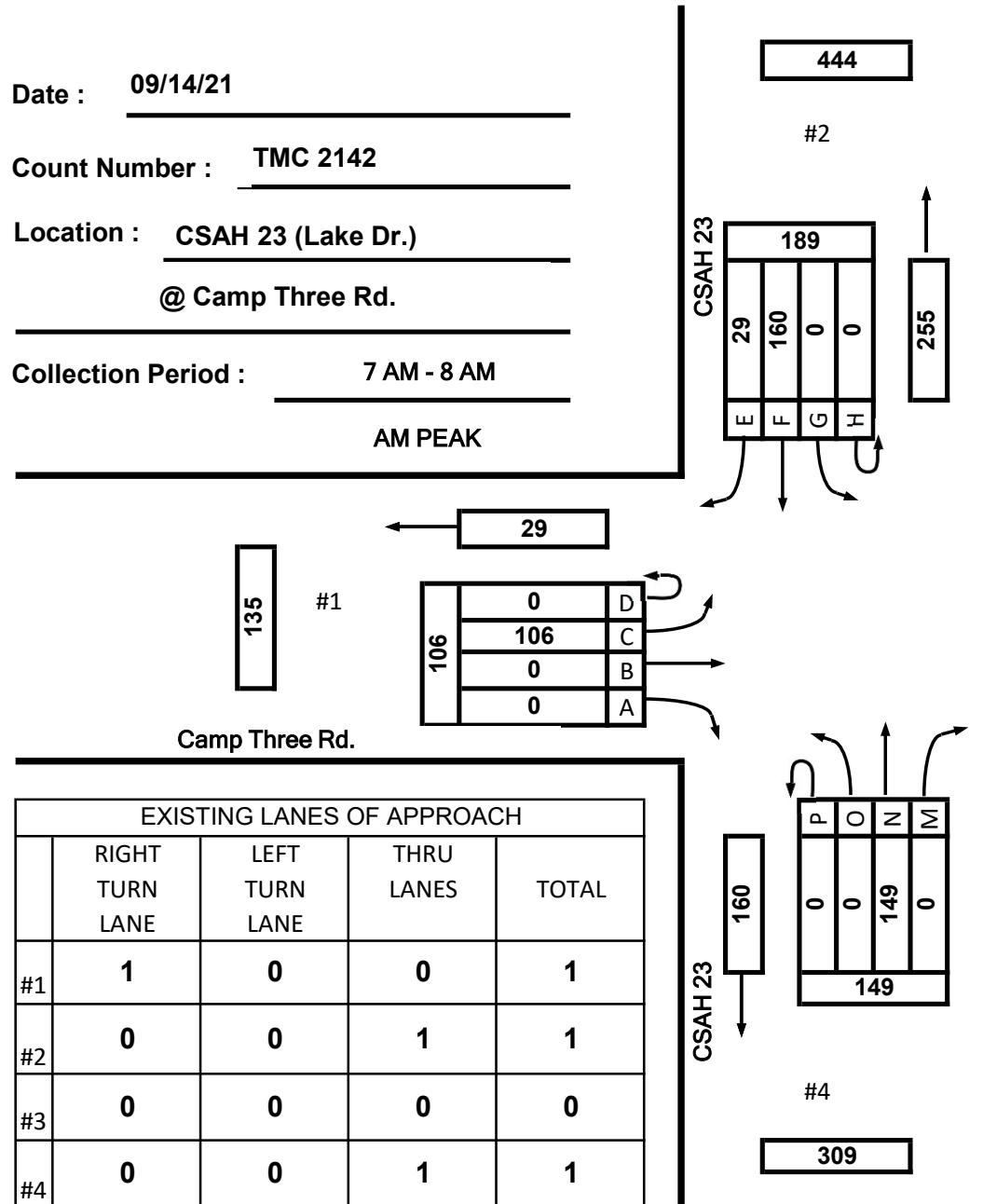
Traffic Volume and Turning Movement Study

Date : 09/14/21

Count Number : TMC 2142

Location : CSAH 23 (Lake Dr.)
@ Camp Three Rd.

Collection Period : 7 AM - 8 AM
AM PEAK



Anoka County Highway Department

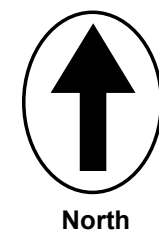
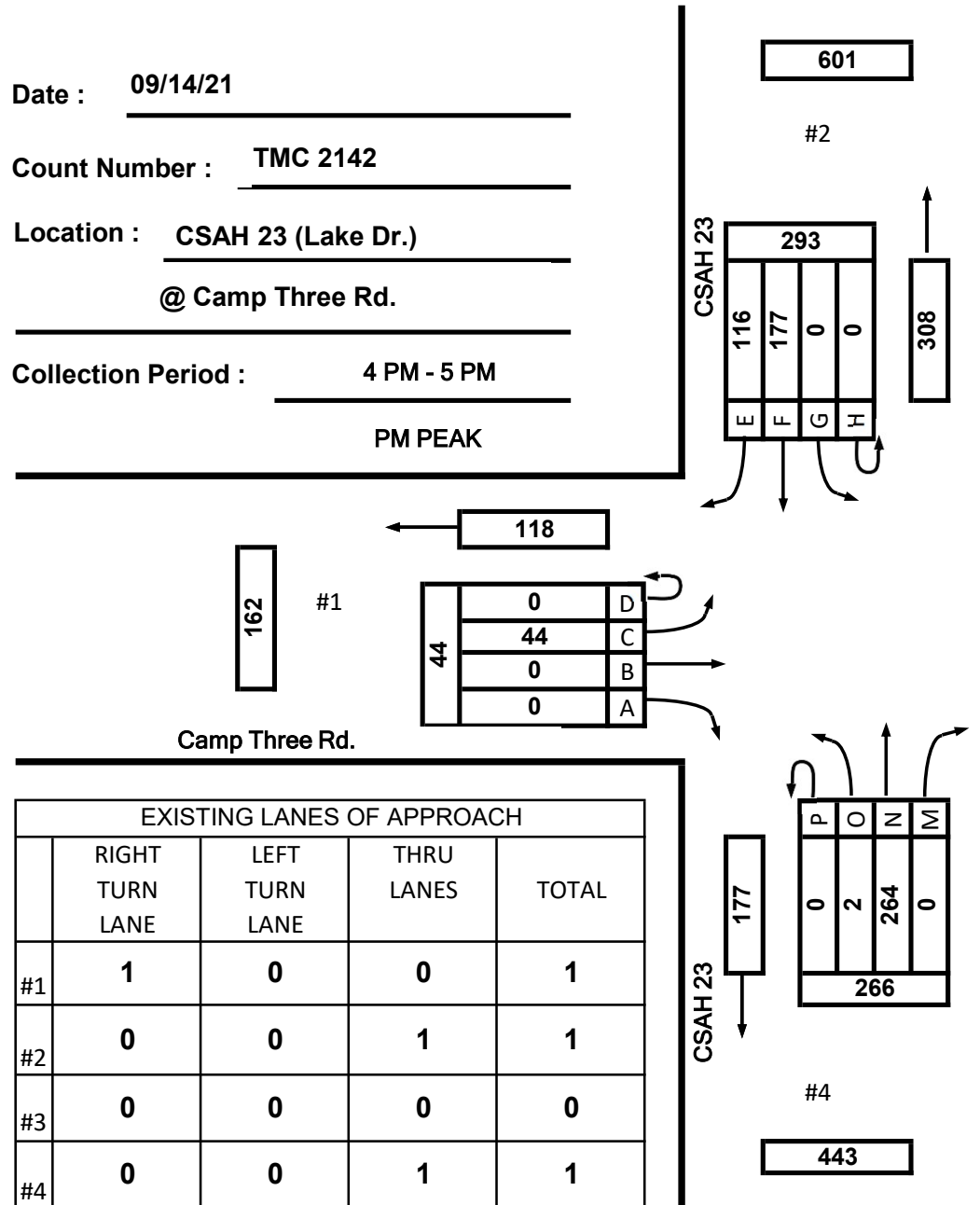
Traffic Volume and Turning Movement Study

Date : 09/14/21

Count Number : TMC 2142

Location : CSAH 23 (Lake Dr.)
@ Camp Three Rd.

Collection Period : 4 PM - 5 PM
PM PEAK



EXISTING LANES OF APPROACH				
	RIGHT TURN LANE	LEFT TURN LANE	THRU LANES	TOTAL
#1	1	0	0	1
#2	0	0	1	1
#3	0	0	0	0
#4	0	0	1	1

Anoka County Highway Department
 Traffic Volume and Turning Movement Study

**CSAH 23 @ Camp Three Rd
Columbus MN
Tuesday, September 14, 2021**

Time	Southbound CSAH 23						Westbound 0						Northbound CSAH 23						Eastbound Camp Three Rd						VEHICLE TOTAL						
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total							
12:00 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	5
12:15 AM	0	0	2	2	0	4	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	7
12:30 AM	0	0	3	0	0	3	0	0	0	0	0	0	0	1	1	0	0	2	0	1	0	0	0	0	0	1	0	0	0	1	6
12:45 AM	0	0	1	1	0	2	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	5
Hourly Total	0	0	7	3	0	10	0	0	0	0	0	0	0	1	11	0	0	12	0	1	0	0	0	0	0	1	0	0	0	1	23
1:00 AM	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
1:15 AM	0	0	2	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
1:30 AM	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
1:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	7	1	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
2:00 AM	0	0	1	3	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
2:15 AM	0	0	2	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
2:30 AM	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
2:45 AM	0	0	2	2	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Hourly Total	0	0	8	6	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
3:00 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	0	0	0	1	0	0	0	1	3
3:15 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:30 AM	0	0	2	1	0	3	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	4
3:45 AM	0	0	2	1	0	3	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	6
Hourly Total	0	0	6	2	0	8	0	0	0	0	0	0	0	0	5	0	0	5	0	1	0	0	0	0	0	1	0	0	0	1	14
4:00 AM	0	0	3	0	0	3	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	0	0	0	1	0	0	0	1	5
4:15 AM	0	0	2	0	0	2	0	0	0	0	0	0	0	0	1	0	0	1	0	3	0	0	0	0	0	3	0	0	0	3	6
4:30 AM	0	0	8	0	0	8	0	0	0	0	0	0	0	0	6	0	0	6	0	3	0	0	0	0	0	3	0	0	0	3	17
4:45 AM	0	0	6	0	0	6	0	0	0	0	0	0	0	0	7	0	0	7	0	7	0	0	0	0	0	7	0	0	0	7	20
Hourly Total	0	0	19	0	0	19	0	0	0	0	0	0	0	0	15	0	0	15	0	14	0	0	0	0	0	14	0	0	0	14	48
5:00 AM	0	0	11	1	0	12	0	0	0	0	0	0	0	0	6	0	0	6	0	5	0	0	0	0	0	5	0	0	0	5	23
5:15 AM	0	0	21	0	0	21	0	0	0	0	0	0	0	0	8	0	0	8	0	11	0	0	0	0	0	11	0	0	0	11	40
5:30 AM	0	0	27	1	0	28	0	0	0	0	0	0	0	0	7	0	0	7	0	13	0	0	0	0	0	13	0	0	0	13	48
5:45 AM	0	0	43	1	0	44	0	0	0	0	0	0	0	0	9	0	0	9	0	14	0	0	0	0	0	14	0	0	0	14	67
Hourly Total	0	0	102	3	0	105	0	0	0	0	0	0	0	0	30	0	0	30	0	43	0	0	0	0	0	43	0	0	0	43	178
6:00 AM	0	0	22	2	0	24	0	0	0	0	0	0	0	0	14	0	0	14	0	10	0	0	0	0	0	10	0	0	0	10	48
6:15 AM	0	0	33	2	0	35	0	0	0	0	0	0	0	0	14	0	0	14	0	10	0	0	0	0	0	10	0	0	0	10	59
6:30 AM	0	0	42	5	0	47	0	0	0	0	0	0	0	0	26	0	0	26	0	16	0	0	0	0	0	16	0	0	0	16	89
6:45 AM	0	0	36	1	0	37	0	0	0	0	0	0	0	1	27	0	0	28	0	16	0	0	0	0	0	16	0	0	0	16	81
Hourly Total	0	0	133	10	0	143	0	0	0	0	0	0	0	1	81	0	0	82	0	52	0	0	0	0	0	52	0	0	0	52	277
7:00 AM	0	0	28	8	0	36	0	0	0	0	0	0	0	0	40	0	0	40	0	18	0	0	0	0	0	18	0	0	0	18	94
7:15 AM	0	0	42	8	0	50	0	0	0	0	0	0	0	0	42	0	0	42	0	40	0	0	0	0	0	40	0	0	0	40	132
7:30 AM	0	0	39	6	0	45	0	0	0	0	0	0	0	0	41	0	0	41	0	23	0	0	0	0	0	23	0	0	0	23	109
7:45 AM	0	0	51	7	0	58	0	0	0	0	0	0	0	0	26	0	0	26	0	25	0	0	0	0	0	25	0	0	0	25	109
Hourly Total	0	0	160	29	0	189	0	0	0	0	0	0	0	0	149	0	0	149	0	106	0	0	0	0	0	106	0	0	0	106	444

**CSAH 23 @ Camp Three Rd
Columbus MN
Tuesday, September 14, 2021**

Time	Southbound CSAH 23						Westbound 0						Northbound CSAH 23						Eastbound Camp Three Rd						VEHICLE TOTAL	
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total		
8:00 AM	0	0	31	3	0	34	0	0	0	0	0	0	0	0	27	0	0	0	27	0	14	0	0	0	14	75
8:15 AM	0	0	21	3	0	24	0	0	0	0	0	0	0	0	32	0	0	0	32	0	9	0	0	0	9	65
8:30 AM	0	0	32	5	0	37	0	0	0	0	0	0	0	0	32	0	0	0	32	0	15	0	0	0	15	84
8:45 AM	0	0	38	8	0	46	0	0	0	0	0	0	0	1	20	0	0	0	21	0	5	0	0	0	5	72
Hourly Total	0	0	122	19	0	141	0	0	0	0	0	0	0	1	111	0	0	0	112	0	43	0	0	0	43	296
9:00 AM	0	0	21	6	0	27	0	0	0	0	0	0	0	1	44	0	0	0	45	0	12	0	0	0	12	84
9:15 AM	0	0	21	9	0	30	0	0	0	0	0	0	0	0	41	0	0	0	41	0	10	0	1	0	11	82
9:30 AM	0	0	27	5	0	32	0	0	0	0	0	0	0	0	31	0	0	0	31	0	7	0	0	0	7	70
9:45 AM	0	0	21	7	0	28	0	0	0	0	0	0	0	0	25	0	0	0	25	0	7	0	1	0	8	61
Hourly Total	0	0	90	27	0	117	0	0	0	0	0	0	0	1	141	0	0	0	142	0	36	0	2	0	38	297
10:00 AM	0	0	29	6	0	35	0	0	0	0	0	0	0	1	22	0	0	0	23	0	9	0	0	0	9	67
10:15 AM	0	0	23	4	0	27	0	0	0	0	0	0	0	0	29	0	0	0	29	0	8	0	0	0	8	64
10:30 AM	0	0	24	7	0	31	0	0	0	0	0	0	0	1	30	0	0	0	31	0	2	0	0	0	2	64
10:45 AM	0	0	20	6	0	26	0	0	0	0	0	0	0	0	27	0	0	0	27	0	5	0	0	0	5	58
Hourly Total	0	0	96	23	0	119	0	0	0	0	0	0	0	2	108	0	0	0	110	0	24	0	0	0	24	253
11:00 AM	0	0	20	4	0	24	0	0	0	0	0	0	0	0	22	0	0	0	22	0	8	0	0	0	8	54
11:15 AM	0	0	19	6	0	25	0	0	0	0	0	0	0	0	30	0	0	0	30	0	3	0	0	0	3	58
11:30 AM	0	0	33	9	0	42	0	0	0	0	0	0	0	1	35	0	0	0	36	0	8	0	0	0	8	86
11:45 AM	0	0	32	10	0	42	0	0	0	0	0	0	0	1	34	0	0	0	35	0	3	0	0	0	3	80
Hourly Total	0	0	104	29	0	133	0	0	0	0	0	0	0	2	121	0	0	0	123	0	22	0	0	0	22	278
12:00 PM	0	0	18	6	0	24	0	0	0	0	0	0	0	0	21	0	0	0	21	0	9	0	0	0	9	54
12:15 PM	0	0	32	9	0	41	0	0	0	0	0	0	0	1	28	0	0	0	29	0	7	0	1	0	8	78
12:30 PM	0	0	29	5	0	34	0	0	0	0	0	0	0	0	28	0	0	0	28	0	9	0	0	0	9	71
12:45 PM	0	0	24	9	0	33	0	0	0	0	0	0	0	0	28	0	0	0	28	0	13	0	1	0	14	75
Hourly Total	0	0	103	29	0	132	0	0	0	0	0	0	0	1	105	0	0	0	106	0	38	0	2	0	40	278
1:00 PM	0	0	23	10	0	33	0	0	0	0	0	0	0	0	40	0	0	0	40	0	7	0	0	0	7	80
1:15 PM	0	0	30	7	0	37	0	0	0	0	0	0	0	0	25	0	0	0	25	0	6	0	0	0	6	68
1:30 PM	0	0	26	11	0	37	0	0	0	0	0	0	0	0	33	0	0	0	33	0	14	0	0	0	14	84
1:45 PM	0	0	32	14	0	46	0	0	0	0	0	0	0	0	29	0	0	0	29	0	3	0	0	0	3	78
Hourly Total	0	0	111	42	0	153	0	0	0	0	0	0	0	0	127	0	0	0	127	0	30	0	0	0	30	310
2:00 PM	0	0	28	11	0	39	0	0	0	0	0	0	0	0	40	0	0	0	40	0	9	0	0	0	9	88
2:15 PM	0	0	35	20	0	55	0	0	0	0	0	0	0	0	37	0	0	0	37	0	8	0	0	0	8	100
2:30 PM	0	0	33	18	0	51	0	0	0	0	0	0	0	0	43	0	0	0	43	0	10	0	0	0	10	104
2:45 PM	0	0	42	26	0	68	0	0	0	0	0	0	0	0	47	0	0	0	47	0	9	0	0	0	9	124
Hourly Total	0	0	138	75	0	213	0	0	0	0	0	0	0	0	167	0	0	0	167	0	36	0	0	0	36	416
3:00 PM	0	0	37	14	0	51	0	0	0	0	0	0	0	0	50	0	0	0	50	0	8	0	1	0	9	110
3:15 PM	0	0	34	20	0	54	0	0	0	0	0	0	0	0	52	0	0	0	52	0	2	0	0	0	2	108
3:30 PM	0	0	35	17	0	52	0	0	0	0	0	0	0	1	50	0	0	0	51	0	6	0	1	0	7	110
3:45 PM	0	0	44	17	0	61	0	0	0	0	0	0	0	1	74	0	0	0	75	0	14	0	0	0	14	150
Hourly Total	0	0	150	68	0	218	0	0	0	0	0	0	0	2	226	0	0	0	228	0	30	0	2	0	32	478

**CSAH 23 @ Camp Three Rd
Columbus MN
Tuesday, September 14, 2021**

Time	Southbound CSAH 23						Westbound 0						Northbound CSAH 23						Eastbound Camp Three Rd						VEHICLE TOTAL	
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total		
4:00 PM	0	0	45	26	0	71	0	0	0	0	0	0	0	0	58	0	0	0	58	0	8	0	0	0	8	137
4:15 PM	0	0	48	27	0	75	0	0	0	0	0	0	0	2	63	0	0	0	65	0	15	0	0	0	15	155
4:30 PM	0	0	48	32	0	80	0	0	0	0	0	0	0	0	61	0	0	0	61	0	11	0	0	0	11	152
4:45 PM	0	0	36	31	0	67	0	0	0	0	0	0	0	0	82	0	0	0	82	0	10	0	0	0	10	159
Hourly Total	0	0	177	116	0	293	0	0	0	0	0	0	0	2	264	0	0	0	266	0	44	0	0	0	44	603
5:00 PM	0	0	41	17	0	58	0	0	0	0	0	0	0	0	66	0	0	0	66	0	10	0	1	0	11	135
5:15 PM	0	0	45	21	0	66	0	0	0	0	0	0	0	0	58	0	0	0	58	0	19	0	0	0	19	143
5:30 PM	0	0	40	21	0	61	0	0	0	0	0	0	0	0	59	0	0	0	59	0	12	0	0	0	12	132
5:45 PM	0	0	38	25	0	63	0	0	0	0	0	0	0	0	37	0	0	0	37	0	14	0	0	0	14	114
Hourly Total	0	0	164	84	0	248	0	0	0	0	0	0	0	0	220	0	0	0	220	0	55	0	1	0	56	524
6:00 PM	1	0	22	16	0	39	0	0	0	0	0	0	0	0	36	0	0	0	36	0	12	0	0	0	12	87
6:15 PM	0	0	27	17	0	44	0	0	0	0	0	0	0	1	37	0	0	0	38	0	7	0	1	0	8	90
6:30 PM	0	0	17	19	0	36	0	0	0	0	0	0	0	0	42	0	0	0	42	0	4	0	0	0	4	82
6:45 PM	0	0	16	11	0	27	0	0	0	0	0	0	0	1	27	0	0	0	28	0	6	0	0	0	6	61
Hourly Total	1	0	82	63	0	146	0	0	0	0	0	0	0	2	142	0	0	0	144	0	29	0	1	0	30	320
7:00 PM	0	0	18	11	0	29	0	0	0	0	0	0	0	0	24	0	0	0	24	0	10	0	0	0	10	63
7:15 PM	0	0	20	19	0	39	0	0	0	0	0	0	0	0	30	0	0	0	30	0	7	0	0	2	7	76
7:30 PM	0	0	26	11	0	37	0	0	0	0	0	0	0	0	25	0	0	0	25	0	12	0	0	0	12	74
7:45 PM	0	0	22	12	0	34	0	0	0	0	0	0	0	0	26	0	0	0	26	0	12	0	0	0	12	72
Hourly Total	0	0	86	53	0	139	0	0	0	0	0	0	0	0	105	0	0	0	105	0	41	0	0	2	41	285
8:00 PM	0	0	22	15	0	37	0	0	0	0	0	0	0	0	19	0	0	0	19	0	5	0	0	0	5	61
8:15 PM	0	0	15	16	0	31	0	0	0	0	0	0	0	0	12	0	0	0	12	0	3	0	0	0	3	46
8:30 PM	0	0	15	7	0	22	0	0	0	0	0	0	0	0	15	0	0	0	15	0	1	0	0	0	1	38
8:45 PM	0	0	12	11	0	23	0	0	0	0	0	0	0	0	12	0	0	0	12	0	2	0	0	0	2	37
Hourly Total	0	0	64	49	0	113	0	0	0	0	0	0	0	0	58	0	0	0	58	0	11	0	0	0	11	182
9:00 PM	0	0	9	9	0	18	0	0	0	0	0	0	0	0	5	0	0	0	5	0	1	0	0	0	1	24
9:15 PM	0	0	12	6	0	18	0	0	0	0	0	0	0	1	5	0	0	0	6	0	2	0	0	0	2	26
9:30 PM	0	0	18	4	0	22	0	0	0	0	0	0	0	0	9	0	0	0	9	0	3	0	0	0	3	34
9:45 PM	0	0	7	6	0	13	0	0	0	0	0	0	0	0	8	0	0	0	8	0	0	0	0	0	0	21
Hourly Total	0	0	46	25	0	71	0	0	0	0	0	0	0	1	27	0	0	0	28	0	6	0	0	0	6	105
10:00 PM	0	0	9	1	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	12
10:15 PM	0	0	6	6	0	12	0	0	0	0	0	0	0	0	6	0	0	0	6	0	4	0	0	0	4	22
10:30 PM	0	0	5	3	0	8	0	0	0	0	0	0	0	0	4	0	0	0	4	0	1	0	0	0	1	13
10:45 PM	0	0	2	2	0	4	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	5
Hourly Total	0	0	22	12	0	34	0	0	0	0	0	0	0	0	11	0	0	0	11	0	7	0	0	0	7	52
11:00 PM	0	0	2	4	0	6	0	0	0	0	0	0	0	0	4	0	0	0	4	0	0	0	0	0	0	10
11:15 PM	0	0	3	0	0	3	0	0	0	0	0	0	0	0	3	0	0	0	3	0	3	0	0	0	3	9
11:30 PM	0	0	2	0	0	2	0	0	0	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	5
11:45 PM	0	0	2	1	0	3	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	5
Hourly Total	0	0	9	5	0	14	0	0	0	0	0	0	0	0	12	0	0	0	12	0	3	0	0	0	3	29
DAILY TOTAL	1	0	2006	773	0	2780	0	0	0	0	0	0	0	16	2236	0	0	2252	0	672	0	8	2	680	5712	
Cars	1	0	1776	756	0	2533	0	0	0	0	0	0	0	16	2019	0	0	2035	0	663	0	8	2	671	5239	
Heavy Vehicles	0	0	230	17	0	247	0	0	0	0	0	0	0	0	217	0	0	217	0	9	0	0	0	9	473	
Heavy Vehicle %	0.00%	0.00%	11.47%	2.20%	0.00%	8.88%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	9.70%	0.00%	0.00%	9.64%	0.00%	1.34%	0.00%	0.00%	0.00%	1.32%	8.28%	

**CSAH 23 @ Camp Three Rd
Columbus MN
Tuesday, September 14, 2021
AM Peak Hour**

Time	Southbound						Westbound						Northbound						Eastbound						VEHICLE TOTAL												
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total													
7:00 AM	0	0	28	8	0	36	0	0	0	0	0	0	0	0	40	0	0	40	0	18	0	0	0	18	0	0	42	0	0	42	0	40	0	0	0	40	94
7:15 AM	0	0	42	8	0	50	0	0	0	0	0	0	0	0	42	0	0	42	0	40	0	0	0	40	0	0	41	0	0	41	0	23	0	0	0	23	132
7:30 AM	0	0	39	6	0	45	0	0	0	0	0	0	0	0	41	0	0	41	0	25	0	0	0	25	0	0	26	0	0	26	0	25	0	0	0	25	109
7:45 AM	0	0	51	7	0	58	0	0	0	0	0	0	0	0	26	0	0	26	0	25	0	0	0	25	0	0	0	0	0	0	0	25	0	0	0	25	109
Peak Hour Total PHF	0.000	0.000	160	29	0.000	0.815	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	149	0.000	0.000	0.887	0.000	0.663	0.000	0.000	0.000	0.663	0.000	0.000	0.000	0.000	0.000	0.000	106	0.663	0.000	0.000	0.000	0.663	444

PM Peak Hour

Time	Southbound						Westbound						Northbound						Eastbound						VEHICLE TOTAL												
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total													
4:00 PM	0	0	45	26	0	71	0	0	0	0	0	0	0	0	58	0	0	58	0	8	0	0	0	8	0	0	63	0	0	63	0	15	0	0	0	15	137
4:15 PM	0	0	48	27	0	75	0	0	0	0	0	0	0	2	63	0	0	65	0	15	0	0	0	15	0	0	61	0	0	61	0	11	0	0	0	11	155
4:30 PM	0	0	48	32	0	80	0	0	0	0	0	0	0	0	61	0	0	61	0	11	0	0	0	11	0	0	82	0	0	82	0	10	0	0	0	10	152
4:45 PM	0	0	36	31	0	67	0	0	0	0	0	0	0	0	82	0	0	82	0	10	0	0	0	10	0	0	0	0	0	0	0	10	0	0	0	10	159
Peak Hour Total PHF	0.000	0.000	177	116	0.000	0.916	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	264	0.000	0.000	0.811	0.000	0.733	0.000	0.000	0.000	0.733	0.000	0.000	0.000	0.000	0.000	0.000	44	0.733	0.000	0.000	0.000	0.733	603

Total Vehicles On Leg		5689	
Vehicles Entering Intersection		2780	
Vehicles Exiting Intersection		2909	
Southbound			
Cars	756	1776	0
Heavy	17	230	0
Total	773	2006	0



Total Vehicles on Leg 1469	Vehicles Entering Intersection 680	Eastbound	Cars	Heavy	Total	
			2	0	2	
			0	0	0	
	663		9	672		
	Vehicles Exiting Intersection 789		0	0	0	
8	0	8				

Daily Volumes

Total Vehicles on Leg 0	Westbound	Cars	Heavy	Total	
		0	0	0	
		0	0	0	
		0	0	0	
		Vehicles Entering Intersection 0	0	0	
Vehicles Exiting Intersection 0	0	0	0		

Cars	0	0	16	2019	0
Heavy	0	0	0	217	0
Total	0	0	16	2236	0
Northbound					
Vehicles Entering Intersection			2252		
Vehicles Exiting Intersection			2014		
Total Vehicles On Leg			4266		

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2142

Study Date : 09/17/2021

Signal Warrants - Summary

Major Street Approaches

Northbound: CSAH 23 (Lake Dr.)

Number of Lanes : 1

Total Approach Volume: 2,252

Southbound: CSAH 23 (Lake Dr.)

Number of Lanes : 1

Total Approach Volume: 2,780

Minor Street Approaches

Eastbound: Camp Three Rd.

Number of Lanes : 1

Total Approach Volume: 680

Warrant Summary (Rural Values Apply)

Warrant 1 - Eight Hour Vehicular Volumes.....Not Satisfied

Warrant 1A - Minimum Vehicular Volume.....Not Satisfied

Required volumes reached for 0 hours, 8 are needed

Warrant 1B - Interruption of Continuous Traffic.....Not Satisfied

Required volumes reached for 0 hours, 8 are needed

Warrant 1C - Combination of Warrants.....Not Satisfied

Required 1A volumes reached for 1 hours, 8 are needed

Required 1B volumes reached for 2 hours, 8 are needed

Warrant 2 - Four Hour Volumes.....Not Satisfied

Number of hours (0) volumes exceed minimum < minimum required (4).

Warrant 3 - Peak Hour.....Not Satisfied

Warrant 3A - Peak Hour Delay.....Not Satisfied

Approach volumes on minor street don't exceed minimums for any one hour period. Delay data not evaluated.

Warrant 3B - Peak Hour Volumes.....Not Satisfied

Volumes do not exceed minimums for any one hour period.

Warrant 4 - Pedestrian Volumes.....Not Evaluated

Warrant 5 - School Crossing.....Not Evaluated

Warrant 6 - Coordinated Signal System.....Not Evaluated

Warrant 7 - Crash Experience.....Not Evaluated

Warrant 8 - Roadway Network.....Not Evaluated

Warrant 9 - Intersection Near a Grade Crossing.....Not Evaluated

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2142

Study Date : 09/17/2021

Warrant 1A - Minimum Volumes

Description

Intended for sites where the volume of intersecting traffic is the principal reason for consideration of a signal installation.

Summary

Only 0 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **True**
Number of Major Lanes = **1**
Number of Minor Lanes = **1**

Volume Requirements

Rural Factor of 70 % applied
Veh/Hr Major = **350**

Veh/Hr Minor = **105**

Time	Major Road CSAH 23 (Lake Dr.)				Total	Minor Road Camp Three Rd.		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
16:00 - 17:00	266	+	293	=	559	44	0	No
16:15 - 17:15	274	+	280	=	554	47	0	No
15:45 - 16:45	259	+	287	=	546	48	0	No
16:30 - 17:30	267	+	271	=	538	51	0	No
16:45 - 17:45	265	+	252	=	517	52	0	No
15:30 - 16:30	249	+	259	=	508	44	0	No
15:15 - 16:15	236	+	238	=	474	31	0	No
17:00 - 18:00	220	+	248	=	468	56	0	No
15:00 - 16:00	228	+	218	=	446	32	0	No
14:45 - 15:45	200	+	225	=	425	27	0	No
17:15 - 18:15	190	+	229	=	419	57	0	No
14:30 - 15:30	192	+	224	=	416	30	0	No
14:15 - 15:15	177	+	225	=	402	36	0	No
14:00 - 15:00	167	+	213	=	380	36	0	No
17:30 - 18:30	170	+	207	=	377	46	0	No
13:45 - 14:45	149	+	191	=	340	30	0	No
07:00 - 08:00	149	+	189	=	338	106	0	No
17:45 - 18:45	153	+	182	=	335	38	0	No
07:15 - 08:15	136	+	187	=	323	102	0	No
06:45 - 07:45	151	+	168	=	319	97	0	No
13:30 - 14:30	139	+	177	=	316	34	0	No
06:30 - 07:30	136	+	170	=	306	90	0	No
18:00 - 19:00	144	+	146	=	290	30	0	No
07:30 - 08:30	126	+	161	=	287	71	0	No
13:15 - 14:15	127		159		286	32	0	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2142

Study Date : 09/17/2021

Warrant 1B - Interruption of Continuous Traffic

Description

Intended for sites where the volume of the major street is so heavy that traffic on the minor street suffers excessive delay or hazard.

Summary

Only 0 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **True**
 Number of Major Lanes = **1**
 Number of Minor Lanes = **1**

Volume Requirements

Rural Factor of 70 % applied
 Veh/Hr Major = **525**
 Veh/Hr Minor = **52**

Time	Major Road				Minor Road		Met?	
	Major NB	+	Major SB	=	Total	Minor EB		Minor WB
16:00 - 17:00	266	+	293	=	559	44	0	No
16:15 - 17:15	274	+	280	=	554	47	0	No
15:45 - 16:45	259	+	287	=	546	48	0	No
16:30 - 17:30	267	+	271	=	538	51	0	No
16:45 - 17:45	265	+	252	=	517	52	0	No
15:30 - 16:30	249	+	259	=	508	44	0	No
15:15 - 16:15	236	+	238	=	474	31	0	No
17:00 - 18:00	220	+	248	=	468	56	0	No
15:00 - 16:00	228	+	218	=	446	32	0	No
14:45 - 15:45	200	+	225	=	425	27	0	No
17:15 - 18:15	190	+	229	=	419	57	0	No
14:30 - 15:30	192	+	224	=	416	30	0	No
14:15 - 15:15	177	+	225	=	402	36	0	No
14:00 - 15:00	167	+	213	=	380	36	0	No
17:30 - 18:30	170	+	207	=	377	46	0	No
13:45 - 14:45	149	+	191	=	340	30	0	No
07:00 - 08:00	149	+	189	=	338	106	0	No
17:45 - 18:45	153	+	182	=	335	38	0	No
07:15 - 08:15	136	+	187	=	323	102	0	No
06:45 - 07:45	151	+	168	=	319	97	0	No
13:30 - 14:30	139	+	177	=	316	34	0	No
06:30 - 07:30	136	+	170	=	306	90	0	No
18:00 - 19:00	144	+	146	=	290	30	0	No
07:30 - 08:30	126	+	161	=	287	71	0	No
13:15 - 14:15	127		159		286	32	0	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2142

Study Date : 09/17/2021

Warrant 1C Combination of Warrants

Description

Intended for sites where the traffic volumes don't meet individual warrants but where Warrants 1A and 1B are both met to 80% of their stated values.

Summary

Only 1 hours meet 1A minimums.
Only 2 hours meet 1B minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **True**
Number of Major Lanes = **1**
Number of Minor Lanes = **1**

Volume Requirements

Rural Factor of 70% applied
Warrant 1A 1B
Veh/Hr Major = **280 420**

Veh/Hr Minor = **84 42**

Major Road CSAH 23 (Lake Dr.)

Minor Road Camp Three Rd.

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1A?
06:30 - 07:30	136	+	170	=	306	90	0	Yes
16:00 - 17:00	266	+	293	=	559	44	0	No
16:15 - 17:15	274	+	280	=	554	47	0	No
15:45 - 16:45	259	+	287	=	546	48	0	No
16:30 - 17:30	267	+	271	=	538	51	0	No
16:45 - 17:45	265	+	252	=	517	52	0	No
15:30 - 16:30	249	+	259	=	508	44	0	No
15:15 - 16:15	236	+	238	=	474	31	0	No
17:00 - 18:00	220	+	248	=	468	56	0	No
15:00 - 16:00	228	+	218	=	446	32	0	No
14:45 - 15:45	200	+	225	=	425	27	0	No
17:15 - 18:15	190	+	229	=	419	57	0	No

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1B?
16:30 - 17:30	267	+	271	=	538	51	0	Yes
15:30 - 16:30	249	+	259	=	508	44	0	Yes
15:15 - 16:15	236	+	238	=	474	31	0	No
15:00 - 16:00	228	+	218	=	446	32	0	No
14:45 - 15:45	200	+	225	=	425	27	0	No
14:30 - 15:30	192	+	224	=	416	30	0	No
14:15 - 15:15	177	+	225	=	402	36	0	No
14:00 - 15:00	167	+	213	=	380	36	0	No
17:30 - 18:30	170	+	207	=	377	46	0	No
13:45 - 14:45	149	+	191	=	340	30	0	No
07:00 - 08:00	149	+	189	=	338	106	0	No
17:45 - 18:45	153	+	182	=	335	38	0	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2142

Study Date : 09/17/2021

Warrant 2 - Four Hour Volumes

Description

Intended for sites where the volume of intersecting traffic during any four hours of the day is the principal reason for consideration of a signal installation.

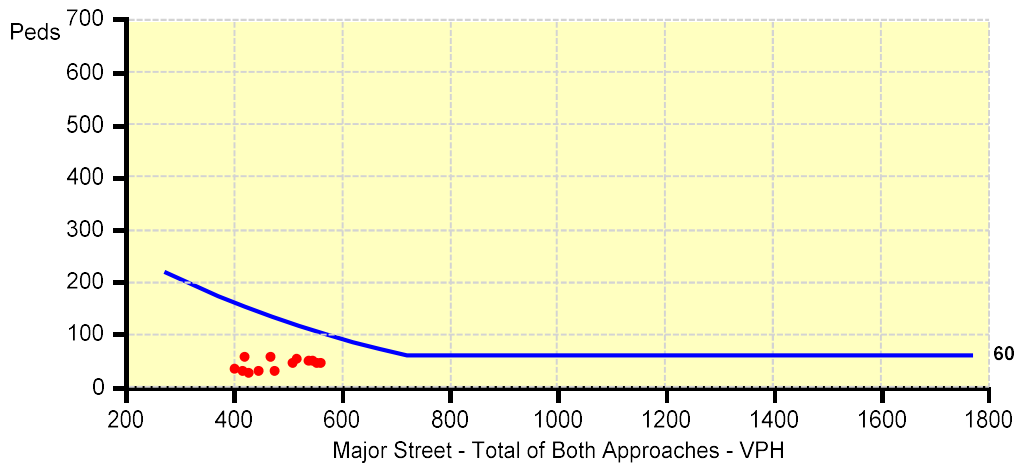
Summary

Only 0 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **True**
 Number of Major Lanes = **1**
 Number of Minor Lanes = **1**

Time	Major Road CSAH 23 (Lake Dr.)				Total	Minor Road Camp Three Rd.		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
16:00 - 17:00	266	+	293	=	559	44	0	No
16:15 - 17:15	274	+	280	=	554	47	0	No
15:45 - 16:45	259	+	287	=	546	48	0	No
16:30 - 17:30	267	+	271	=	538	51	0	No
16:45 - 17:45	265	+	252	=	517	52	0	No
15:30 - 16:30	249	+	259	=	508	44	0	No
15:15 - 16:15	236	+	238	=	474	31	0	No
17:00 - 18:00	220	+	248	=	468	56	0	No
15:00 - 16:00	228	+	218	=	446	32	0	No
14:45 - 15:45	200	+	225	=	425	27	0	No
17:15 - 18:15	190	+	229	=	419	57	0	No



ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2142

Study Date : 09/17/2021

Warrant 3B - Peak Hour Volumes

Description

Intended for sites where the volume of intersecting traffic during one hour of the day is the principal reason for consideration of a signal installation.

Summary

Only 0 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **True**
 Number of Major Lanes = **1**
 Number of Minor Lanes = **1**

Time	Major Road CSAH 23 (Lake Dr.)				Total	Minor Road Camp Three Rd.		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
16:00 - 17:00	266	+	293	=	559	44	0	No
16:15 - 17:15	274	+	280	=	554	47	0	No
15:45 - 16:45	259	+	287	=	546	48	0	No
16:30 - 17:30	267	+	271	=	538	51	0	No
16:45 - 17:45	265	+	252	=	517	52	0	No
15:30 - 16:30	249	+	259	=	508	44	0	No
15:15 - 16:15	236	+	238	=	474	31	0	No
17:00 - 18:00	220	+	248	=	468	56	0	No
15:00 - 16:00	228	+	218	=	446	32	0	No
14:45 - 15:45	200	+	225	=	425	27	0	No
17:15 - 18:15	190	+	229	=	419	57	0	No

